

2021 Practicum Areas – Spring Career Development Events

2021 FLORICULTURE CDE AND PRACTICUM AREAS

- **Requires a four (4) member team.**
- **Identification of Plant Materials – 200 points**
 - 40 plant specimens to be identified from the Plant ID list in the current 2017-2021 New Jersey FFA CDE Handbook
- **General Knowledge & Problem Solving Exam – 250 points**
 - 25 General knowledge questions plus 5 problem solving questions will be combined into one exam.
 - In addition to the references listed in the New Jersey FFA CDE Handbook, exam questions will also be obtained from the Horticultural Lesson Plan Library in MyCAERT.
- **One Annual Practicum (worth 100 points)**
 - Growing Procedures
- **Two Rotational Practicums from the following selection (each area is worth 75 points)**
 - Media Selling
 - Identifying and Controlling Plant Disorders
 - Handling a Hazardous Situation

2021 NURSERY LANDSCAPE CDE AND PRACTICUM AREAS

- **Requires a four (4) member team.**
- **Identification of Plants, Pests, Disorders, Beneficial Insects, Equipment and Supplies – 150 points**
 - 25 specimens to be identified from the identification lists in the current 2017-2021 New Jersey FFA CDE Handbook
- **General Knowledge Exam – 150 points**
 - Fifty questions
- **Landscape Estimating – 100 points**
 - A landscape drawing will be provided and students will be asked to answer multiple choice questions relating to the design.
- **Written Customer Assistance – 50 points**
- **Nursery Production Practicum – 50 points**
 - One of the activities listed below will be selected.
 - Propagating Nursery Stock
 - Potting Nursery Stock

2021 AGRICULTURAL SALES CDE

- **Requires a four (4) member team.**
- **Written Exam – 100 points**
 - Twenty-five questions
- **Individual Sales Activity – 150 points**
 - The Sales Call scorecard in the New Jersey FFA CDE Handbook will be used by the judge.
- **Team Activity – 150 points**
 - The Team Sales Situation scorecard in the New Jersey FFA CDE Handbook will be used by the judge.
- **2021 Product**
 - Stihl Outdoor Power Tools for Homeowners & Professional Landscapers. Please refer to the Stihl website at <https://www.stihlusa.com/products/all/> for products information.
 - Students will receive their customer profiles during the Team Activity.

2021 ENVIRONMENTAL AND NATURAL RESOURCES CDE AND PRACTICUM AREAS

- **Requires a four (4) member team.**
- **Identification – 100 points**
 - 50 specimens to be identified from the identification lists in the current 2017-2021 New Jersey FFA CDE Handbook
- **Objective Written Exam – 100 points**
 - Fifty questions
- **Two Practicums – 100 points each**

Two of the following will be conducted

 - Data Interpretation
 - Water Analysis
 - Waste Management
- **Team Activity Written Statement – 200 points**
 - As a team, students will prepare a written statement in response to a prompt on the following topic: *“Alternative energy sources: creating a harmonious relationship between alternative energy production and agricultural land use.”*

2021 VETERINARY SCIENCE CDE AND PRACTICUM AREAS

- **Requires a four (4) member team.**
- **Attire**
 - Students must wear either scrubs (top and bottom; solid color) or polo with slacks. All participants must wear closed toed, closed heel and flat shoes. No jewelry may be worn. This includes rings, bracelets, earrings and exposed body piercings. Wrist watches are permitted.
- **Identification – 100 points**
 - 50 items to be identified from the identification lists in the current 2017-2021 New Jersey FFA CDE Handbook.
- **Written Exam – 100 points**
 - Fifty multiple choice questions
- **Current Events – 100 points**
 - Students will prepare a written response to the following topic: *The roll of telemedicine in veterinary medicine.*
- **Math Applications Exam – 100 points**
- **Practicum Areas – up to 100 points each**

Two-four activities per year

 - Clinical Procedures

2021 AGRICULTURAL TECHNOLOGY AND MECHANICAL SYSTEMS CDE

- **Requires a four (4) member team.**
- **Written Exam – 50 points**
 - Twenty-five questions
- **Practicum Areas** – Students will be evaluated in each of the five areas listed in the handbook. The specific activities occurring in each area will not be publicized prior to the event; however, the list of skills and competencies have been narrowed down for each area (see below).
 - **Machinery/Equipment Systems Competencies**
 - Identify parts and functions of hydraulic systems
 - Adjust and/or calibrate chemical application, seeding, fertilizing, harvesting, processing and materials handling machinery
 - Select tools and materials for specific repair jobs
 - Select and use appropriate safety equipment
 - Operation and interpretation of circuit diagrams and flowcharts for electrical, hydraulic, fuel, oil, cooling, intake and exhaust systems

(continued on next page)

- **Electrical Systems Competencies**
 - Use appropriate standards for agricultural applications, including the National Electrical Code (NEC), Electrical Testing Laboratory (ETL), Factory Mutual, Underwriters Laboratory (UL), Canadian Standard Association (CSA) and/or OSHA standards.
 - Determine volt, amp and ohm relationships (Ohm's and other application laws).
 - Select motors based upon type of application
 - Interpret electric motor nameplate data
 - Identify electric motors and motor parts
 - Select appropriate wire sizes and protection devices for specific loads and lengths of circuits
 - Read schematics and sketch wiring circuits
- **Compact Equipment Systems Competencies**
 - Interpret wiring diagrams/schematics
 - Conduct equipment pre-operation inspection
 - Perform recommended periodic service jobs (as found in operator's manuals)
 - Use measuring tools and test instruments such as: Micrometer and telescoping gauges, dial indicator, compression tester, torque wrench, VOA (volt-ohm-amp) meter, DMM (digital multi-meter), timing devices, tachometer and dynamometer for determining test procedures
 - Test and service batteries, charging, lighting, warning and cranking systems
- **Environmental and Natural Resources Systems Competencies**
 - Conduct land surveying practices
 - Select irrigation systems for specific conditions
 - Select irrigation equipment and techniques
 - Lay out grade stakes for cut/fills
 - Use water-testing equipment
 - Assemble turf irrigation equipment
 - Install components of irrigation systems for specific applications
- **Structures Systems Competencies**
 - Determine the size, specifications and layout of building
 - Develop a bill of materials
 - Interpret plans and working drawings
 - Select arc welding machines and accessories
 - Read drawings and welding symbols
 - Read metal working plans and prints
 - Operate power tools such as nibblers, drills and saws
 - Operate hand tools such as saws and files
 - Cut and assemble plastic pipe
 - Solder copper fittings, tubing and copper wire
- **General Cluster Skills**
 - All competencies listed in the handbook

PLEASE NOTE

All events will be using the updated 2017-2021 New Jersey FFA Career Development Event rules, identification lists, score cards, etc.

Visit the National FFA Website for the updated National FFA CDE Handbook.

<https://www.ffa.org/participate/cde-lde/>